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 AIA 4



(54) A BITE INDICATOR FOR A FISHING ROD

(71) I, FRANCIS WILLIAM MULCHINTOCK, a British Subject, of 480 Hessle Road, Hull, North Humberside, do hereby declare the invention for which I 5 pray that a Patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to fish bite indicators for fishing rods and has for its object to provide a sensitive, clear indicator for use when fresh-water fishing.

According to the present invention there is provided a bite indicator comprising a 15 ring, means for attaching said ring to a fishing rod, a hollow elliptical element supported on said ring so as to pass freely through said ring when said elliptical element is rotatably displaced, and means 20 presented by said elliptical element to one side of the major axis of the elliptical element for engagement with a fishing line.

Preferably the ring is of rectangular form and conveniently said means for attaching 25 the ring to the fishing rod comprises a spring clip secured to the ring.

Preferably the elliptical element has its 30 external surface to one side of its major axis differently coloured from the external surface to the other side of said axis.

Preferably the means presented by the 35 elliptical member for engagement with the fishing line includes at least one ring projecting from the external surface of the elliptical element and through which ring or rings the fishing line can be threaded.

When more than one ring is provided on 40 the elliptical element said rings may be staggered with respect to the side edges of the external surface and in one embodiment in accordance with the invention the, or each, ring has its axis parallel to the axis of the opening through the hollow elliptical element.

45 In one embodiment in accordance with

the invention the elliptical element includes a tongue, conveniently made from a strip of resilient plastics material, extending tangentially from the external surface of the elliptical element and said tongue is 50 notched at its free end.

A slot in said tongue extends from the root of said notch towards the root of the tongue.

In a preferred embodiment said tongue 55 includes a high friction material presented for engagement with a fishing line engaged by the tongue. The high friction material may conveniently comprise a rubber pad secured to that face of the tongue facing 60 the elliptical element, said rubber pad being secured to the tongue to lie across said slot, and having a slot therein aligned with the slot in the tongue.

In one embodiment in accordance with 65 the invention the indicator is attached to a fishing rod, between two fishing line eyelets of the rod, by means of its clip with its ring, which is of rectangular form, depending and the elliptical element dangling 70 therefrom. The fishing line is threaded through the small rings, projecting from the elliptical element to one side of the major axis thereof and which are conveniently three in number such that, when 75 the line is tensioned between the fishing line eyelet on the rod on each side of the indicator, the rings on the element are drawn by the line to a position adjacent the rod and the major axis of the element 80 lies substantially parallel to the rod. Normally the line runs freely through said small rings when the line is slack.

After a cast has been made the angler 85 reels in his line until the bait is in the desired location and, with slack in the line the elliptical element adopts a suspended position with the external surface to one side of the major axis facing towards the reel. When a fish takes the bait the pull on 90

the line, however light, will tension the line and displace the elliptical element so that it adopts a position with its major axis substantially parallel to the rod and the 5 element will rotate at least partially relative to its supporting ring whereby its external surface on the other side of its major axis is exposed towards the reel as an indication of a bite. Any tugs on the 10 line by a fish taking the bait will rock the element as a further indication to the angler that a fish is interested.

The angler may adjust, by pulling on his line, the elliptical element so that said 15 element is suspended with its major axis parallel to the rod so that the least pull on the line by a fish will tilt the element.

The clip and ring are conveniently metallic but the elliptical element may be made 20 of stiff paper with a water-proof surface, of resilient plastics material either fabricated from sheet material or as a moulding, of light metal or of other light substantially rigid material.

25 In a modification of the indicator a resilient flap or tongue extends tangentially from the external surface of the element towards the plane of the major axis for the element and the free end of the tongue has 30 a notch therein terminating in a slot. When the modified form of indicator is used, the angler's action in reeling-in allows the line to enter the slot, which is dimensioned to frictionally engage the line. With the bait 35 in the desired location the line slackens so that the element can tend towards a suspended position wherein its major axis is substantially vertical and as the element moves towards this position the line is frictionally engaged in the slot in the tongue 40 and the notched end engages against the rod to stabilize the device in its "rest" position. When the line is tensioned by a fish taking the bait, the frictional engagement 45 with the line causes the element to be pulled through the ring, the line is pulled free from the slot, and the element is rotated relative to its supporting ring to indicate to the angler the interest in the 50 bait.

55 Preferably the elliptical element includes a weight located substantially on the major axis of the elliptical member and, when the elliptical element includes a tongue, remote from the tongue. Said weight conveniently comprises a lead-shot retaining tube whereby, by varying the shot within the tube, the weight can be varied as desired. With this arrangement the weight assists 60 the elliptical member to adopt a position with its major axis substantially vertical when the indicator is in its "rest" position.

The invention will now be described further by way of example with reference 65 to the drawings accompanying the

Provisional Specification in which:—

Fig. 1 shows the indicator in a perspective view,

Fig. 2 is a front elevation thereof,

Fig. 3 is a side elevation, and

Fig. 4 shows an alternative form for the elliptical member.

The indicator illustrated in Figs. 1, 2 and 3 comprises a clip 1, of suitable form, for example as available on the market, to 75 enable it to be attached to a fishing rod, with which clip is fast a ring 2 of substantially rectangular shape substantially as illustrated. Extending through such ring 2 is a hollow elliptical element 3 having a 80 single continuous internal surface and a single continuous external surface, the external surface to one side of the major axis being differently coloured from the other side. Three small rings 4, arranged in staggered relation, project from the external surface to one side of the major axis and, in use, a fishing line is threaded through the rings 4.

The rings 4 may be separate parts af- 90 fixed to or partly embedded in the elliptical element 3 or may be formed at the ends of and intermediate the length of a piece of wire attached to or embedded in the elliptical element 3.

95 The internal surface of the element 3 is smooth to facilitate its displacement with respect to the ring 2 but a transverse groove or linear depression may be provided in said surface adjacent the middle ring 4, and in which groove the ring 2 may engage to assist the elliptical element to lie with its major axis substantially horizontal when the indicator is in one of its possible "rest" indicating positions on a fishing rod.

In the second embodiment for the elliptical element shown in Fig. 4 a tongue 5 of relatively stiff but resilient material extends tangentially from the elliptical element to 110 present a free end with a "V" notch 6 and which notch 6 terminates in a slot 7 parallel with the side edges of the tongue 5. The slot 7 is of such width as to frictionally engage a fishing line therein. A split tube 8 is adhesively attached to the inner surface of the element remote from the tongue and is dimensioned to frictionally retain lead shot therein. In the Fig. 4 embodiment the rings 4 are not in staggered relationship and, in 115 operation, the frictional engagement of the line in the slot 7 serves to draw the elliptical element from its "rest" position through the ring 2 to indicate to the angler a disturbance of the bait.

120 It has been found advantageous in some fishing conditions to pass the fishing line through only one of the rings 4, namely the ring 4 closest to the ring 2, and an elliptical element having only one ring 4

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lies within the scope of this invention.

Further, it has been found advantageous, in the embodiments having a tongue 5 to increase the frictional engagement with a fishing line in the slot 7 by securing a rubber pad to the face of the tongue 5 facing the element 3 so that the pad covers the slot 7 and then slotting the rubber, in alignment with the slot 7 so that a fishing line in slot 7 is also frictionally engaged in the slot in the rubber pad.

WHAT I CLAIM IS:—

1. A bite indicator for a fishing rod comprising a ring, means for attaching said ring to a fishing rod, a hollow elliptical element supported on said ring so as to pass freely through said ring when said elliptical element is rotatably displaced, and means presented by said elliptical element to one side of the major axis of the elliptical element for engagement with a fishing line.
2. A bite indicator as claimed in Claim 1 in which the ring is of rectangular form.
3. A bite indicator as claimed in Claim 1 or 2 in which said means for attaching the ring to a fishing rod comprises a spring clip secured to the ring.
4. A bite indicator as claimed in Claim 1, 2 or 3 in which the elliptical element has its external surface to one side of the major axis differently coloured from the external surface to the other side of said axis.
5. A bite indicator as claimed in claim 1, 2, 3 or 4 in which said means presented by the elliptical member for engagement with the fishing line includes at least one ring projecting from the external surface of the elliptical element and through which ring or rings the fishing line can be threaded.
6. A bite indicator as claimed in Claim 5 in which more than one ring is provided on the elliptical element and said rings are staggered with respect to the side edges of the external surface.
7. A bite indicator as claimed in Claim

5 or 6 in which the, or each, ring has its axis parallel to the axis of the opening 50 through the hollow elliptical element.

8. A bite indicator as claimed in any preceding claim in which the elliptical element includes a tongue extending tangentially from the external surface of the elliptical element and said tongue is notched at its free end. 55

9. A bite indicator as claimed in Claim 8 in which a slot in said tongue extends from the root of said notch towards the 60 root of the tongue.

10. A bite indicator as claimed in Claim 8 or 9 in which said tongue includes a high friction material presented for engagement with a fishing line engaged by 65 the tongue.

11. A bite indicator as claimed in Claim 9 and 10 in which said high friction material comprises a rubber pad secured to that face of the tongue facing the elliptical 70 element, said rubber pad being secured to the tongue to lie across said slot, and having a slot therein aligned with the slot in the tongue.

12. A bite indicator as claimed in any 75 preceding claim including weighting means supported by the elliptical element substantially on the major axis of a said element.

13. A bite indicator as claimed in any 80 preceding claim in which the elliptical element is made of a resilient plastics material.

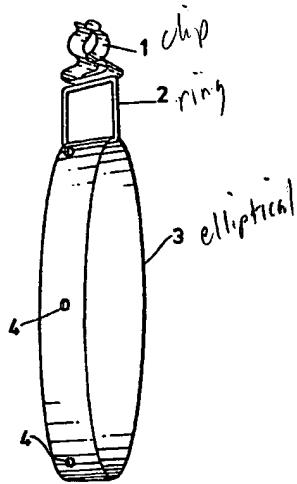
14. A bite indicator as claimed in any 85 preceding claim including a transverse groove or linear depression in the internal surface of the elliptical element.

15. A bite indicator substantially as hereinbefore described with reference to and as illustrated in Figs. 1, 2 and 3 or as 90 modified by Fig. 4 of the drawings accompanying the Provisional Specification.

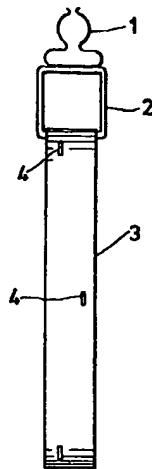
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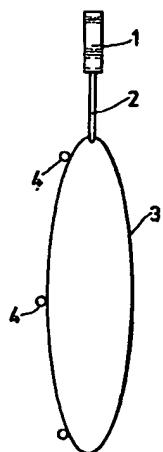
PROVISIONAL SPECIFICATION
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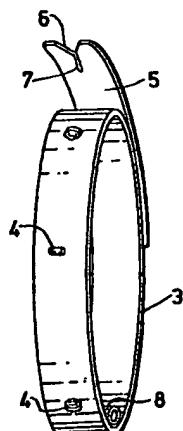
—FIG. 1.—



—FIG. 2.—



—FIG. 3.—



—FIG. 4.—